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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,699	09/29/2006	Nicolaas A. De Munck	2003M091	7132

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EXAMINER	
HEINCER, LIAM J	

ART UNIT	PAPER NUMBER
1796	

MAIL DATE	DELIVERY MODE
12/08/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/568,699	DE MUNCK ET AL.	
	Examiner	Art Unit	
	Liam J. Heincer	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 August 2009 and 03 November 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-12,19,23 and 26-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-12,19,23 and 26-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 10-12, 19, 23, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Godwin et al. (US Pat. 4,543,420) in view of Schlosberg et al. (US Pat. 4,543,420).

Considering Claim 10, 23, and 28: Godwin et al. teaches a process for preparing a plasticizer ester (1:7-10) comprising esterifying a polybasic aromatic carboxylic acid or anhydride with isononyl or isodecyl alcohol (3:20-30); treating the ester with a base; stripping the liquid product; adding powdered/activated carbon/an adsorbent and clay/a filter aid to the liquid; and filtering the product (Example 1). : Godwin et al. teaches the adsorbent as being added at 95 °C (Example 1).

Godwin et al. does not teach filtering the crude ester to remove a liquid product and then stripping the liquid product before the purification steps. However, Schlosberg et al. does teach the filtration of solids from the ester mixture and then removal of

excess alcohol by steam stripping before the final filtration (purifying) steps (Col. 6, lines 1-5). Godwin et al. and Schlosberg et al. are analogous art because they are from the same field of endeavor, namely that of processes for making plasticizer esters. At the time of the invention, a person of ordinary skill in the art would have found it obvious to include the steps of filtration of solids from the ester mixture and then removal of excess alcohol by steam stripping, as taught by Schlosberg et al., in the overall process, as taught by Godwin et al., and would have been motivated to do so because an extra filtration step can enhance the purity of the plasticizer ester as well as enhancing its properties.

Godwin et al. does not teach using phthalic anhydride. However, Schlosberg et al. teaches a plasticizer made from an esterification reaction between phthalic anhydride and an alcohol (Example 1). It would have been obvious to a person having ordinary skill in the art at the time of invention to have used the phthalic anhydride of Schlosberg et al. in the process of Godwin et al., and the motivation to do so would have been, as Schlosberg et al. suggests, phthalate esters have high oxidative stability (Example 1).

The Office recognizes that all of the claimed effects and physical properties are not positively stated by the reference. However, the reference teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties would implicitly be achieved by combining the disclosed ingredients. If it is applicant's position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the examiner's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects by combining only these ingredients.

Considering claims 11 and 12: Godwin et al. teaches the base as being caustic/sodium hydroxide (Example 1).

Considering Claim 19: Godwin et al. teaches the filter aid and adsorbent as being used in a combined amount of 0.3 wt percent (Example 1).

Considering Claims 26-27: Godwin et al. teaches the adsorbent as being added at 95 °C (Example 1).

Claims 10-12, 19, 23, and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ageishi et al. (5,880,310) in view of Schlosberg et al. (5,798,319).

Regarding claim 10, Ageishi et al. teaches a process for producing plasticizer esters comprising (Col. 1, lines 6-7) esterifying an acid or an anhydride (Col. 3, lines 27-28) with an alcohol containing from 6 to 13 carbon atoms to form a crude ester (Col. 3, lines 41-44) and then treating it with a base solution (Col. 3, lines 54-55). The crude ester is purified through a combination of fine filtration using a filter aid and adsorption treatment (Col. 5, lines 8-11). The adsorbent is preferably activated carbon (Example 10). Ageishi et al. additionally teaches that the plasticizer ester is a di-alkyl phthalate (using the specified alcohols and phthalic anhydride will produce these) (Col. 3, lines 25-45) with ethyl hexyl alcohol being preferred (Example 1). Ageish et al. teaches a acid value belwo 0.2 mg KOH/g and a LVR of greater than 0.3 (Table 1).

Ageishi et al. does not teach filtering the crude ester to remove a liquid product and then stripping the liquid product before the purification steps. However, Schlosberg et al. does teach the filtration of solids from the ester mixture and then removal of excess alcohol by steam stripping before the final filtration (purifying) steps (Col. 6, lines 1-5). Ageishi et al. and Schlosberg et al. are analogous art because they are from the same field of endeavor, namely that of process for making plasticizer esters. At the time of the invention, a person of ordinary skill in the art would have found it obvious to include the steps of filtration of solids from the ester mixture and then removal of excess alcohol by steam stripping, as taught by Schlosberg et al., in the overall process, as taught by Ageishi et al., and would have been motivated to do so because an extra filtration step can enhance the purity of the plasticizer ester as well as enhancing its properties.

The Office recognizes that all of the claimed effects and physical properties are not positively stated by the reference. However, the reference teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties would inherently be achieved by combining the disclosed ingredients. If it is applicant's position that this would not be the case: (1) evidence would need to be presented to

support applicant's position; and (2) it would be the examiner's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects by combining only these ingredients.

Regarding claims 11-12, Ageishi et al. additionally teaches that the base solution used in the process is an alkali metal salt, such as sodium hydroxide (Col. 6, lines 9-10).

Regarding claim 19, Ageishi et al. teaches that the adsorbent and the filter aid are used in an amount of 13 g per 1,000 grams of ester/1.3 weight percent (Example 10).

Regarding claim 23, Ageishi et al. does not teach that the filter aid is a clay or that the adsorbent also acts as the filter aid. However, Schlosberg et al. does teach that the adsorbent/filter aid can be clay (Col. 5, lines 55-60). At the time of the invention, a person of ordinary skill in the art would have found it obvious to use clay as filter aid/adsorbent, as taught by Schlosberg et al., in the overall process, as taught by Ageishi et al., and would have been motivated to do so because it is a common filter aid/adsorbent used in these processes and it is a naturally occurring material which makes it more economical than other choices.

Regarding claims 26-27, Ageishi et al. additionally teaches that the adsorption temperature and the filtration temperature are generally between 30° C and 120° C (Col. 5, lines 40-45).

Regarding claim 28, Ageishi et al. additionally teaches that the adsorption temperature and the filtration temperature are generally between 30° C and 120° C (Col. 5, lines 40-45) and that the plasticizer is a C_8 to C_{13} dialkyl phthalate (using the specified alcohols and phthalic anhydride will produce these) (Col. 3, lines 25-45).

Response to Arguments

Applicant's arguments filed November 3, 2009 and August 18, 2009 have been fully considered but they are not persuasive, because:

A) In response to applicant's argument that Godwin et al. and Schlosberg et al. are nonanalogous art, it has been held that a prior art reference must either be in the

field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Godwin et al. and Schlosberg et al. are analogous art because they are from the same field of endeavor, namely that of processes for making plasticizer esters. The fact that Godwin et al. and Schlosberg et al. had different goals for the processes does not render them nonanalogous. The processes of the two references are substantially the same with the exception of the order of process steps. Therefore, a person having ordinary skill in the art at the time of invention would consider them to be analogous art despite a difference in the property being optimized by the references.

B) The applicant's argument that Schlosberg et al. does not avoid a stripping step prior to filtration is not persuasive. The original specification presents stripping and flashing as distinct processes. " Finally, any excess alcohol and water may be removed e.g. by flashing or stripping with a vapour, e.g. with steam or nitrogen, or by a combination thereof". (¶0009). The original claims further support the distinction between flashing and stripping (Original claim 14 (since cancelled)). As the applicant has admitting (pg. 3 of arguments presented November 3, 2009) Schlosberg et al. teaches a "flash step" prior to the filtration (5:43-6:8). As flash processes are not excluded by the claims, the applicant is incorrect in asserting that Schlosberg et al. teaches a stripping step prior to filtration.

C) In response to applicant's argument that Ageishi et al. and Schlosberg et al. are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Ageishi et al. and Schlosberg et al. are analogous art because they are from the same field of endeavor, namely that of processes for making plasticizer esters. The fact that Ageishi et al. and Schlosberg et al. have different end uses for the esters does not render them non-analogous. The

processes of the two references are substantially the same with the exception of the order of process steps. Therefore, a person having ordinary skill in the art at the time of invention would consider them to be analogous art despite a difference in the intended end use of the esters.

D) In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, a person of ordinary skill in the art at the time of invention would have found it obvious to include the steps of filtration of solids from the ester mixture and then removal of excess alcohol by steam stripping, as taught by Schlosberg et al., in the overall process, as taught by Ageishi et al., and would have been motivated to do so because an extra filtration step can enhance the purity of the plasticizer ester as well as enhancing its properties..

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liam J. Heincer whose telephone number is 571-270-3297. The examiner can normally be reached on Monday thru Friday 7:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796

LJH
November 20, 2009